

Remarks

This is responsive to the Office Action mailed September 20, 2005. The amendments serve to more particularly point out and distinctly claim that which is the patentable subject matter of the present invention as claimed. The amendments are proper, do not introduce new matter, do not require additional searching, are not narrowing in view of a prior art rejection, and place the application in proper condition for allowance of all pending claims.

Support for the amendment to claim 1 is found at least in the pivot block 258 as shown in FIG. 11, with the slide 264 having a stationary end fixed in rotation with the pivot block 258 and a linearly extensible distal end to which the gripping block 250 is attached. The gripping member 252 is attached to the gripping block 250.

Support for the amendment to claim 2 is found at least in the disc caddy locating assembly 254 shown in FIG. 11.

Support for the amendment to claims 3 and 4 is found at least in the bar 278, 280.

Support for the amendment to claim 5 is found at least in the linkage 276 shown in FIG. 11.

Support for the amendment to claim 6 is found at least at page 9 line 20 to page 10 line 3.

Support for the amendments to claims 7 and 8 is found at least in the jaws 266, 270 shown in FIG. 11.

Support for the amendment to claim 9 is found is found at least in the slide 268 shown in FIG. 11.

Support for the amendment to claim 10 is found at least in the cylinder 282 shown in FIG. 11.

Support for the amendment to claim 11 is found at least in the cylinder 260 shown in FIG. 11.

Support for the amendment to claim 12 is found at least in the over travel sensor 292 shown in FIG. 11.

Support for the amendment to claim 13 is found at least in the specification at page 10 lines 16-19.

Support for the amendment to claim 19 is found at least in the method 300 of FIG. 12 including the tilting a disc caddy step 304, tilting the gripping block step 314, moving the gripping block step 316, gripping the disc caddy step 320, and pivoting the gripping block step 326.

Support for the amendment to claim 20 is found at least in the method 300 of FIG. 12 including the locating the disc caddy step 318.

Support for new claims 23 and 24 is found at least in the specification at page 12 lines 3-7.

Support for new claims 25 and 26 is found at least in the specification at page 9 lines 28-32.

Support for new claim 27 is found at least in the specification at page 10 lines 16-19.

Support for new claim 28 is found at least in the structure of the gripper slide assembly 248 and equivalents thereof shown in FIG. 11.

Claim Objections

Claims 1, 12, 15, 19, and 21 were objected to for various informalities. Applicant has either amended the claims according to the Office's suggestion or canceled the objectionable claim language, thereby obviating the present objections.

Applicant notes that the original language of claim 21, "means for presenting the disc..." is supported by the specification, such as but not limited to: "FIG. 3 also shows a preferred orientation of the disc caddy 140 for presenting the discs 110 during the assembly process of the DSD 100 (of FIG. 1)." (specification, pg. 4 lines 27-29, emphasis added) In short, it can be said that the caddy is presented at a predetermined location which, in turn, presents the discs at a predetermined location. Nevertheless, Applicant has amended claim 21 to obviate this objection, but such amendment is not narrowing of claim scope over a prior art rejection.

Rejection Under 35 U.S.C. §102(e)

Claims 1-3, 8-10, and 21-22 were rejected as being anticipated by Pederson '460. This rejection is respectfully traversed in view of the clarifying amendments made to independent claims 1 and 21.

Claim 1

Claim 1 is amended herein to more particularly point out and distinctly claim the patentable subject matter which includes at least the following:

A disc caddy presentation apparatus comprising a pivot block; a slide having a linearly stationary proximal end fixed in rotation with the pivot block and a linearly extensible distal end....
(excerpt of claim 1, emphasis added)

The present embodiments contemplate an extensible slide (such as 264) having a linearly stationary end that is pivotable by being fixed in rotation with a pivot block (such as 258). This construction permits orienting the gripping plate (such as 250) in a plane that is parallel to the caddy, which is typically tilted about three degrees to prevent gravity from urging the discs out of the caddy (see specification page 10 lines 16-19). Furthermore, and distinguishable from Pederson '460 and all other art of record, this construction advantageously permits the tilted gripping plate to be moved toward the caddy in a direction that is orthogonal to the caddy, eventually abuttingly engaging the caddy. This orthogonal direction of movement is necessary in order to move one edge of the caddy into the small space between the jaws 266, 270. After the caddy is withdrawn from the in-feed conveyor, the gripping block is then rotated to squarely present the discs through the caddy opening (see specification page 9 lines 1-4).

The lift/tilt assembly 225 of Pederson '460 has a cylinder 600 with an extensible end 620, and with a pivot point 720 attached to the distal end of the extensible end 620. Pederson '460 is wholly silent regarding *a slide having a linearly stationary proximal end fixed in rotation with the pivot block* as in the present embodiments as claimed. Accordingly, the cited references cannot sustain this Section 102 rejection because they do not identically disclose all the features of the present embodiments as recited in claim 1. Reconsideration and withdrawal of the present rejection of claim 1 and the claims depending therefrom are respectfully requested.

Claim 21

For reasons discussed above, the cited references cannot sustain this Section 102 rejection of claim 21 because they do not identically disclose the *means for presenting....*

The *means* element of claim 21 invokes 35 U.S.C. §112, sixth paragraph. Accordingly, the Examiner is obliged to construe the means clause as covering the disclosed structure and equivalents thereof performing the identical function of the claimed embodiments. See *B. Braun Medical, Inc. v. Abbott Lab.*, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997); *In re Donaldson Co. Inc.*, 26 USPQ2d 1845 (Fed. Cir. 1994)(*en banc*); *In re Dossel*, 42 USPQ2d 1881 (Fed. Cir. 1997); *Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. 112, Para. 6*, 65 FR 38510. A failure to do so is reversible error.

As discussed above, the disclosed structure associated with the gripping assembly contemplates an extensible slide having the stationary end thereof attached to the pivot block. Pederson '460 discloses attaching the pivot block to the distal end of the extensible slide. The structure of Pederson '460 is not within the realm of equivalent structure because it functionally cannot move the tilted gripper block orthogonally to the caddy, as is necessary in the present embodiments as claimed. When the means element is properly construed, it is clear that the cited references do not teach or suggest any structure capable of the identical function as the present embodiments as claimed. Accordingly, independent claim 21 is allowable over the art of record. Reconsideration and withdrawal of the rejection of claim 21 are respectively requested.

Rejection Under 35 U.S.C. §102(b)

Claims 14-17 and 19-22 were rejected as being anticipated by Kang 723. This rejection is respectfully traversed in view of the clarifying amendments made to independent claims 19 and 21 and the cancellation of claim 14.

Claim 19

Claim 19 is amended herein to more particularly point out and distinctly claim the patentable subject matter which includes at least the following:

tilting a disc caddy confining a disc to a first angular orientation to counter gravity acting to displace the disc from the caddy...pivoting the gripping block to tilt the disc caddy to a second angular orientation different than the first angular orientation to present the disc caddy to a picking operation to remove the disc from the disc caddy.
(excerpt of claim 19, emphasis added)

As discussed above, the present embodiments as claimed contemplate *tilting* the caddy, such as by about three degrees, to prevent gravity from urging the discs out of the caddy (see specification page 10 lines 16-19). Also as discussed above, the present embodiments as claimed further contemplate the gripping assembly *pivoting* the caddy in compensation for the tilted condition so that the discs can be removed in a substantially horizontal direction (see specification page 9 lines 1-4).

The transfer apparatus of Kang '723 does not tilt the carrier; more generally Kang '723 does not address the problem of circuit boards being urged out of the carrier by gravity whatsoever. More particularly, Kang '723 is wholly silent regarding *tilting a disc caddy confining a disc to a first angular orientation to counter gravity acting to displace the disc from the caddy...pivoting the gripping block to tilt the disc caddy to a second angular orientation different than the first angular orientation* as in the present embodiments as claimed. Accordingly, the cited references cannot sustain this Section 102 rejection because they do not identically disclose all the features of the present embodiments as recited in claim 19. Reconsideration and withdrawal of the present rejection of claim 19 and the claims depending therefrom are respectfully requested.

Claim 21

For reasons discussed above, the cited references cannot sustain this Section 102 rejection of claim 21 because they do not identically disclose the *means for presenting*....

Again, the *means* element of claim 21 invokes 35 U.S.C. §112, sixth paragraph. Accordingly, the Examiner is obliged to construe the means clause as covering the disclosed structure and equivalents thereof performing the identical function of the claimed embodiments. See *B. Braun Medical, Inc. v. Abbott Lab.*, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997); *In re Donaldson Co. Inc.*, 26 USPQ2d 1845 (Fed. Cir. 1994)(*en banc*); *In re Dossel*, 42 USPQ2d 1881 (Fed. Cir. 1997); *Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. 112, Para. 6*, 65 FR 38510. A failure to do so is reversible error.

When the means element is properly construed, it is clear that the cited references do not teach or suggest any structure capable of the identical function as the present embodiments as claimed. That is, Kang '723 does not disclose any structure capable of tilting the carrier to avoid the force of gravity acting on components in the carrier. Accordingly, independent claim 21 is allowable over the art of record. Reconsideration and withdrawal of the rejection of claim 21 are respectively requested.

Rejection Under 35 U.S.C. 103(a)

Claims 4, 5, 6, 7, 8, 11, 12, 13, and 18 were rejected as being unpatentable over various combinations of the cited references. These rejections are moot in light of the extent to which the present amendments change the claimed subject matter. Additionally, these claims are allowable as depending from an allowable independent claim, for reasons

above, and providing additional limitations thereto. Reconsideration and withdrawal of the present rejection of these claims are respectfully requested.

Conclusion

This is a complete response to the Office Action mailed September 20, 2005. The Applicant requests reconsideration and passage to allowance all the pending claims.

Applicant has also submitted herewith a request for telephone interview to clarify any remaining issues preventing passage of all pending claims to allowance. Applicant believes the interview is necessary due to the extent to which the claims are presently amended.

The Examiner is invited to contact the Attorneys listed below should any questions arise concerning this response.

Respectfully submitted,

By: 

Mitchell K. McCarthy, Registration No. 38,794
Randall K. McCarthy, Registration No. 39,297
Fellers, Snider, Blankenship, Bailey and Tippens, P.C.
100 N. Broadway, Suite 1700
Oklahoma City, Oklahoma 73102
Telephone: (405) 232-0621
Facsimile: (405) 232-9659
Customer No. 33900